

NAG-1-1302

DEPARTMENT OF EDUCATIONAL CURRICULUM & INSTRUCTION  
DARDEN COLLEGE OF EDUCATION  
OLD DOMINION UNIVERSITY  
NORFOLK, VIRGINIA 23529

**VIRGINIA NETWORK FOR TECHNOLOGY (VANT) - YEAR 4**

By

E. Murray Rudisill, Principal Investigator

FINAL  
7N-64-CK  
OCIT.  
56884  
P-4

Summary of Research (Final Report)  
For the period ended June 30, 1995

Prepared for  
National Aeronautics and Space Administration  
Langley Research Center  
Hampton, VA 23681-0001

N95-71384

Unclass

29/64 0056884

Under  
Research Grant NAG-1-1302  
Robert L. Yang, Technical Monitor  
Technology Applications Group

Submitted by the  
Old Dominion University Research Foundation  
P.O. Box 6369  
Norfolk, VA 23518

June 1995

(NASA-CR-198852) VIRGINIA NETWORK  
FOR TECHNOLOGY (VANT): YEAR 4 Final  
Report, period ending, 30 Jun. 1995  
(Old Dominion Univ.) 4 p



## **Virginia Network for Technology (VANT)**

**NASA #NAG-1-1302**

**ODU #113084**

**Final Report - Year 4**

The fourth and final year of the grant has continued to be very successful. The VANT workshop during the August 1-12, 1994 period trained an additional 50 teachers. This group when combined with the previous two summer institutes now totals 147 teachers who have become skilled in using technology in their mathematics and science classrooms.

### **Workshop (course) description:**

This course is designed to emphasize approaches to learning that enhance the development of mathematical power for all students through the integration of cutting-edge technology into the math and science curriculum. The purpose of the Virginia Network for Technology is to train teacher technology specialists for middle school and high schools as leaders who are committed to disseminating information and quickly moving technology into the classrooms before it becomes obsolete. Teachers will have an opportunity to examine and evaluate a wide range technology, explore approaches to teaching and evaluating learning with technology, and to plan strategies for implementation that are highly consistent with the National Council of Teachers of Mathematics Curriculum and Evaluation Standards.

### **Objectives:**

1. To prepare mathematics and science teachers to use a calculator/computer-based approach to teaching and learning,
2. To develop leadership skills as technology specialists in order that participants will engage in dissemination through appropriate inservice activities,
3. To develop strategies, materials, and plans for future implementation of calculator/computer-based approaches to teaching and learning,
4. To prepare mathematics and science teachers to use techniques which have been proven successful in teaching females and minorities and,
5. To establish a network in Virginia and North Carolina for sharing of information and support of the use of emerging technology.

**Requirements:**

1. Students are expected to attend the class daily, be prompt, and to actively contribute to class discussions.
2. Students are expected to complete all cooperative-group homework lab sessions which illustrate the change in teaching in a technology enhanced classroom.
3. Students are expected to make a group presentation of a lesson using technology and to share their lesson plan with VANT participants.
4. Students are expected to complete a test using a graphing calculator which illustrates the changes in evaluation in a technology enhanced classroom.
5. Students are expected to write an exit paper of no more than 2 pages which include the following:
  - a. An evaluation of the two week institute.
  - b. A plan of implementation for integrating technology into classroom instruction and disseminating it through further workshop activities and,
  - c. A statement indicating if they are interested in serving as a site coordinator for the VANT Outreach interactive television course in January. Participation in the VANT Outreach project is not required.

**2nd Instructional Team**

A second instructional team was again used during the year as well as for the institute August 1-12. This team has been working together for the past two years and includes Laura Plotz, Verle Walters, Denise Walston, and Kevin Simms.

**Follow-Up**

We are analyzing data gathered from the participants, both before and after the workshops, to measure the changes that took place in interest, usefulness, achievement, attitude, etc. during the two-week period. A copy of the survey instrument is included in this report.

**NSF Funding**

We are very pleased to report that the National Science Foundation (NSF) has again funded a three-year project that complements the VANT project by expanding the scope and sequence through television broadcasting. The new technology workshops will train more specialists who can then serve as site coordinators for the satellite broadcasts. This is a very exciting concept that will ultimately have tremendous potential for reaching teachers throughout a broader geographic area. The telecasts were shown during the Spring semester, 1994 and Spring semester, 1995 and proved to be very

successful. There were 10 telecast sites and approximately 300 teachers who completed the 1 credit course each semester.

### **Summary**

The VANT project has trained technology specialists for middle schools and high schools. The first year of the project was spent in training the basic instructional team and the past three summers the 2-week workshops trained 147 mathematics and science teachers in the use of calculators and computers. The emphasis has been purposely placed on the graphing calculator. Even though the NASA funding has ended, the project was so successful that NSF has picked up the expenses for this summer's fourth workshop. It has been a pleasure to work with this grant.

Submitted by:

A handwritten signature in cursive script, reading "E. M. Rudisill".

E. M. Rudisill  
Project Director